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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,577	08/31/2001	Kota Kiyama	35.C15744	9442

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FITZPATRICK CELLA HARPER & SCINTO
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NEW YORK, NY 10112

EXAMINER

TRAN, LY T

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 05/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,577

Applicant(s)

KIYAMA, KOTA

Examiner

Ly T TRAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed 2/10/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 2/10/03 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-5 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koto et al. (JP 143025) in view of Tsuruoka (USPN 5,502,545)

Koto et al discloses a recording apparatus for rotating an endless belt member and supplying electricity to the belt member so as absorb a recording medium to the surface of the belt member and performing a recording on the recording medium by a recording device (Abstract) and a recording medium conveyance apparatus comprising:

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- conveyance mechanism comprising a belt (Fig.2: element 16) which conveys by rotating while contacting a recording medium ,
- a fastening force generation mechanism for fastening the recording medium to the belt (Abstract)) comprising an electrical feeding member capable of supplying electricity to the belt member comprising a portion to be fed at a first voltage value for fastening the recording medium (Abstract) to a position of the endless belt member located opposed to the recording device (Fig.2: element 31),
- a plurality of electrodes which line up in such a manner as to be along the surface contacting the recording medium of the belt and an electrical feeding member for applying a voltage in such a manner that the adjacent electrodes have different potentials and plurality of electrodes are provided in the belt (Abstract),
- recording device is an ink jet recording head and ink jet recording head uses a thermal energy as energy for emitting the ink (Fig.2: element 40).

However, Koto et al. fails to teach:

- a conveyance failure detection element for detecting a conveyance failure of the recording medium,
- a control portion for performing a control of belt member and electrical feeding member based on a detection signal of the conveyance failure detection element, the electrical feeding

member feeding the second electrical voltage value to remove an attraction force of the endless belt member,

- discharge portion for discharging a recording medium outside the apparatus and the conveying failure detection element is a discharge conveyance failure detection element for detecting the conveyance failure of the recording medium in the vicinity of the discharge portion,
- control portion control the electrical feeding member in such a manner that the potentials of plurality of electrodes are equalized according to the detection of the conveyance failure by the conveyance failure detection element and control portion performs an elimination of the charge which is charged in the plurality of electrodes according to the detection of the conveyance failure

Tsuruoka teaches:

- a conveyance failure detection element for detecting a conveyance failure of the recording medium (Column 8: line 60-63)
- a control portion for performing a control of belt member and electrical feeding member based on a detection signal of the conveyance failure detection element, the electrical feeding member feeding the second electrical voltage value to the position of the endless belt member (Fig.2: element 37, Column 11: line 11-67, Column 12: line 1-19 and Abstract, by destaticize the transfer

belt, no voltage or a zero voltage is applied to the belt, the zero voltage is a second voltage value fed to the belt)

- discharge portion for discharging a recording medium outside the apparatus and the conveying failure detection element is a discharge conveyance failure detection element for detecting the conveyance failure of the recording medium in the vicinity of the discharge portion (Fig.2: element S9).
- With respect to the limitation of control portion control the electrical feeding member in such a manner that the potentials of plurality of electrodes are equalized according to the detection of the conveyance failure by the conveyance failure detection element and control portion performs an elimination of the charge which is charged in the plurality of electrodes according to the detection of the conveyance failure, while Tsuruoka does not specifically teach these features, Tsuruoka teaches applying electricity to the belt member so as to absorb a recording medium to the surface of the belt (Column 5: line 52-62) detecting conveyance failure (Column 8: line 60-63) and based on the detection, destaticize the transfer belt (Abstract), it does provide the general teaching of cutting of the voltage by destaticize the transfer belt to equalize the potentials of plurality of electrodes, so as to easily to remove the paper jam.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of Koto et al. to have a detector, feeding a second voltage to the belt, equalize the potentials of plurality of electrodes as taught by Tsuruoka. The motivation of doing so is easier to release paper jam.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koto et al. (JP 143025) in view Tsuruoka (USPN 5,502,545) as applied to claim 1 above, further in view of Stoeberl (USPN 4,549,826).

The combination of Koto and Tsuruoka fails to teach the conveyance failure element detects a separation gap of the recording medium on the belt member from the belt member in the direction of the recording device.

Stoebert teaches a sensor coupled to the paper leveling gap, detecting curl paper ends, folds at the end of the roll that are too pronounced and that could potentially lead to jamming of the paper (Column 1: line 11-12, line 45-52) by detecting the curl paper end, the gap between the belt and the paper is obtain in order to detect the conveyance failure, sensing means for detecting the moveable member further away from stationary member than the minimum preset width of the gap (Column 3: line 36-47, line 46-49).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a sensor coupled to the paper leveling gap, detecting curl paper ends, folds at the end of the roll that are too pronounced and that could potentially lead to jamming of the paper sensing means for detecting

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the moveable member further away from stationary member than the minimum preset width of the gap as taught by Stoeberl. The motivation of doing so is in order to avoid a malfunctioning paper feed therefore obtain a high paper consumption.

Response to Arguments

4. Applicant's arguments with respect to claims 1-5 and 11-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T TRAN whose telephone number is 703-308-0752. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Adams Russ can be reached on 703-308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0967.



May 5, 2003



JUDY NGUYEN
PRIMARY EXAMINER